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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,840	01/22/2004	Jae-Yoon Chung	101896-0237	5883
21125	7590	04/19/2005	EXAMINER	
NUTTER MCCLENNEN & FISH LLP WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604			COMSTOCK, DAVID C	
			ART UNIT	PAPER NUMBER
			3732	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

31p

<b>Office Action Summary</b>	<b>Application No.</b> 10/762,840	<b>Applicant(s)</b> CHUNG ET AL.	
	<b>Examiner</b> David Comstock	<b>Art Unit</b> 3732	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,8 and 10-24 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 18-24 is/are allowed.  
 6) ☒ Claim(s) 1-6,8 and 10-17 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8, 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Angelucci et al. (2003/0045935; cited by Applicant).

Angelucci et al. disclose a method of implanting a medical device 1 comprising a hollow elongate body 3, a longitudinal axis CL, opposed cephalad and caudal sides, opposed posterior and anterior sides, the sides defining an interior lumen, and opposed first and second open ends (see Fig. 1A, 2A, 2B, 9A, 9B). The device has a perforation-free anterior side, e.g., the side nearest arrow 3 in Fig. 1A. The ends have a concave surface 8A, 8B and are angled toward each other such that their planes intersect. The outside of the device is convex and the opposite inside of the device is concave. The device includes first and second halves comprising portions that are angled with respect to each other (e.g. portions 88A, 88B in Fig. 1C). The device is anatomically shaped and can have various cross-sectional shapes including square, rounded, parallelogram, etc. The edges of the device are optionally rounded (see Fig. 8B). The device may

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incorporate opposing fixation element receiving flanges 31A, 31B, 32A, 32B, and screws 37A, 37B for additional securement. (See Figs. 1B, 2B, 4A, 4B, 5A, 8A, and 8B and paragraphs 45, 56, and 76). The pointed portion opposite fixation element receiving member (i.e., at the bottom corners of the device, as seen in Figure 4B) constitutes an extension member, since the points are members that extend away from the main body. The method comprises cutting the vertebrae in a desired location, including the utilization of an optional third hinge cut, and implanting the device between the cut ends of the vertebral member (see e.g., paragraphs 0032-0043 and 0060).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angelucci et al. (2003/0045935; cited by Applicant) in view of Martin (6,132,464; cited by Applicant).

Angelucci et al. disclose the claimed invention except for explicitly reciting slots or a curved shape with convex/concave outer surfaces. Martin discloses a similar device comprising a member 19 having a concave surface opposite a convex surface to accommodate the anatomical configuration of the spine and improve the safety and effectiveness of the device (see Fig. 2 and col. 2, lines 26-37). It would have been obvious to one having ordinary skill in the art at the time the invention was made to

provide the implant of Angelucci et al. with convex/concave outer opposing surfaces, in view of Martin, in order to accommodate the anatomical configuration of the spine and improve the safety and effectiveness of the implant. It also would have been obvious to substitute slots for holes since these were both well-known functionally equivalent aperture means used in implants at the time of the invention; and accordingly, this would involve only routine skill in the art.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Angelucci et al. (2003/0045935; cited by applicant) in view of Fallin et al. (6,419,703; cited by Applicant).

Angelucci et al. disclose the claimed invention except for the spinous process member. Fallin et al. disclose a similar device 100 having a prosthetic spinous process 135 to mimic the natural spinous process, i.e. serve as an attachment point for muscle, and improve the effectiveness of the device and the outcome of the procedure (see Fig. 2 and col. 3, lines 3-10 and col. 7, line 51 - col. 8, line 21). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the laminoplasty implant of Angelucci et al. with a spinous process replacement member, in view of Fallin et al., in order to mimic the natural spinous process, and improve the effectiveness of the device and the outcome of the procedure.

***Allowable Subject Matter***

Claims 18-24 are allowable over the prior art of record.

### ***Response to Arguments***

Applicant's amendment and arguments in favor of allowance have been fully considered but they are not persuasive with regard to claims 1 and 15 and claims depending therefrom, notwithstanding any tentative opinions expressed in the interview of 26 January 2005. It is noted that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961). Here, the new limitations do exactly that--merely claim the use of a particular structure, i.e. the body having opposed open ends and a perforation-free side or having a particular prosthetic process as set forth in claims 1 and 15, respectively.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Comstock whose telephone number is (571) 272-4710. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D. Comstock  
09 April 2005



EDUARDO C. ROBERT  
PRIMARY EXAMINER